

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte RYUHEI KAMETANI, SUSUMU MUTA and TAKASHI OHIRA

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Appeal No. 2001-2635  
Application 09/168,083

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ON BRIEF

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Before COHEN, FRANKFORT, and McQUADE, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 2, 3 and 5 through 9, the only claims remaining in this application. Claims 1 and 4 have been canceled.

Appellants' invention relates to a golf ball having a cover and a transfer printed pattern in reverse on said cover, wherein the transfer printed pattern includes an ink layer containing a pigment and a dispersion of small, flattened metal particles. On page 2 of the specification, appellants note that an object of the invention is to provide a golf ball having a transferred pattern with a metallic luster and which is superior in durability. A copy of representative claim 9, as found in the Appendix to appellants' brief, is attached to this decision.<sup>1</sup>

The sole prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Murphy	5,427,378	Jun. 27, 1995
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<sup>1</sup> Regarding dependent claim 5, we note that the version of this claim shown in the Appendix to the brief is incorrect. Claim 5 as originally presented depends from "claim 4," and has never been amended to alter that dependency. However, since claim 4 was canceled in Paper No. 8, filed September 6, 2000, claim 5 now depends from a canceled claim. This defect is worthy of correction during any further prosecution of this application before the examiner. For purposes of appeal, we will assume that claim 5 depends from independent claim 9, as do all of the other claims remaining in the application.

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Claims 2, 3 and 5 through 9 stand rejected under 35 U.S.C.  
§ 103(a) as being unpatentable over Murphy.

Rather than reiterate the examiner's full statement of the above-noted rejection and the conflicting viewpoints advanced by the examiner and appellants regarding the rejection, we make reference to the final rejection (Paper No. 7, mailed June 6, 2000) and the examiner's answer (Paper No. 14, mailed February 27, 2001) for the examiner's reasoning in support of the rejection, and to appellants' brief (Paper No. 13, filed December 18, 2000) and reply brief (Paper No. 15, filed April 27, 2001) for the arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art Murphy reference, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we have made the determination which follows.

In the examiner's view, Murphy discloses a golf ball having a cover including a pattern comprising pigment (col. 4, line 24) and metal particles made of aluminum (col. 5, lines 1-2). Murphy additionally notes (col. 4, lines 26-28) that the size and quantity of particles applied to the surface of the golf ball can vary depending upon the reflective property desired. In column 4, lines 29-32, the patentee indicates that the size of particles can vary from very small to large, but generally will be in the range from 0.002" x 0.002" x 0.00045" in thickness to 0.125" square, with a thickness of 0.002". Recognizing that the size of the metal particles disclosed in Murphy is nothing like the size of the flattened metal particles set forth in appellants' independent claim 9 on appeal, the examiner contends that varying the size of the metal particles does not provide a patentable distinction, since Murphy discloses that particle size may vary depending upon desired properties. More specifically, the examiner urges that where general parameters are set forth in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation, citing In re Aller, 105 USPQ 233 (answer, pages 3-4).

Appellants argue, among other things, that the examiner's position on sizing of the metal particles in Murphy to be of an average diameter in the range of 10 to 50 micron and of an average thickness in the range of 50 to 500 angstroms, as set forth in claim 9 on appeal, amounts to an invitation to experiment without any guidance in Murphy as to the desirability of the proposed modification. In that regard, appellants point out that the direction provided in Murphy vis-a-vis particle size is toward large reflective particles, so that each individual particle forms an individual "glitter speck" (col. 4, lines 13-16), and is thus away from appellants' dispersion of minute metal particles which are more than 200 times smaller than the particles disclosed in Murphy. Moreover, appellants urge that the test data beginning on page 6 of the specification and continuing through page 11, line 11, as well as the reasons set forth on page 4 of the specification for having the particular size ranges set forth in claim 9 establish criticality of the claimed parameters.

We agree with appellants that, given the teachings in Murphy, it would have required more than optimization through "routine experimentation" for one of ordinary skill in the art to go from the relatively large size reflective particles or "glitter specks" taught in Murphy to the minute metal particles in the dispersion claimed by appellants, which particles are more than 200 times smaller than the metal particles taught in Murphy. Simply stated, while the discovery of optimum or workable ranges from the general particle size parameters disclosed in Murphy might have led one of ordinary skill in the art, through routine experimentation, to a particle size that would be perhaps 20%, 30%, 50%, or even approaching 100% larger or smaller than those set forth in that patent, we see nothing in Murphy that would have provided any suggestion or motivation for one of ordinary skill in the art to contemplate a particle size that is more than 200 times smaller than the particle size set forth in Murphy. For that reason, we will not sustain the examiner's rejection of claim 9, or claims 2, 3 and 5 through 8 which depend therefrom, under 35 U.S.C. § 103(a).

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Accordingly, the decision of the examiner is reversed.

REVERSED

IRWIN CHARLES COHEN	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
JOHN P. McQUADE	)	
Administrative Patent Judge	)	

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#### APPENDIX

9. A golf ball comprising; a cover, a transfer printed pattern in reverse on said cover, said pattern having an ink layer containing pigment and dispersion of flattened metal particles, an average diameter of metal particles in said dispersion being in the range of 10 to 50 microns and an average thickness of said metal particles being in the range of 50 to 500 angstroms.